## Blended Learning Situations, Solutions, and Several Stunning Surprises

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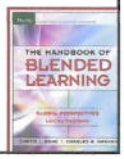
## What I will discuss...

1. Definitions of blended learning
2. Advantages and disadvantages
3. Models of blended learning
4. Examples of blended learning
5. Implications for blended learning

## Part 1. Handbook of Blended Learning (HOBLe)

- University of Phoenix, Capella University, JIU, National University
- Microsoft, IBM, Sun, Cisco, Macromedia, Oracle, WebCT
- The World Bank, the DOD in USA
- In Canada: York University and the University of Calgary
- Other universities in Japan, Korea, Malaysia, Singapore, China, NZ, South Africa, Israel, Mexico, Australia, Wales, England, USA



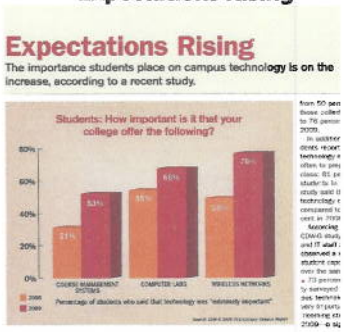
## Blended Learning: Two Parts

1. Models and Frameworks
2. Problems and Solutions (i.e., examples)

(When do blends make sense?)

## Who is demanding fully online and blended learning?

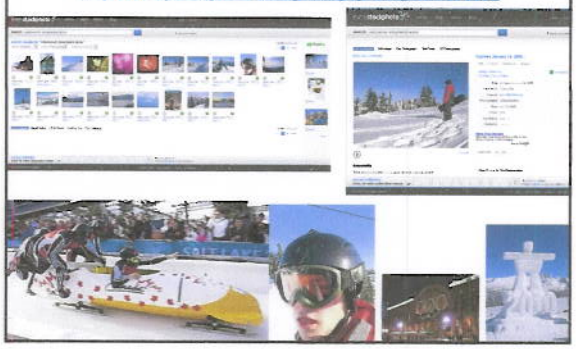
## Campus Technology, February 2010, Expectations Rising



## Campus Technology, February 2010, David Raths, Winning them Over

## Everystockphoto.com (courses on the Winter Olympics, photography, motivation, geography, Canadian culture, meteorology, physics, etc.)

http://everystockphoto.com/photo.php?imageId=571578

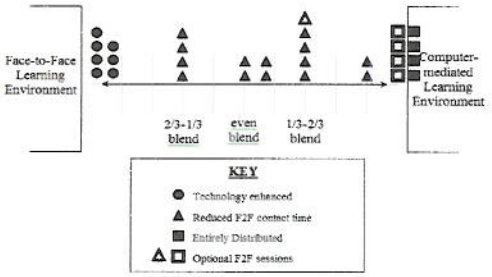


## Blended Learning Defined and Explained

## Myth #1: People will know what I am saying when I say "blended learning."
## Myth #2: Blended is the same as "hybrid."
### The Sloan Consortium

| Proportion of content delivered online | Type of Course | Typical Description |
|---|---|---|
| 0% | Traditional | Course with no online technology used - content is delivered in writing or orally. |
| 1 to 29% | Web facilitated | Course which uses web-based technology to facilitate what is essentially a face-to-face course. Might use Blackboard or WebCT to post the syllabus and assignments, for example. |
| 30 to 79% | Blended/Hybrid | Course that is a blend of the online and face-to-face course. Substantial proportion of the content is delivered online, typically uses online discussions, typically has some face-to-face meetings |
| 80+% | Online | A course where the vast bulk of the content is delivered online. Typically has no face-to-face meetings. |

## Myth #3: Knowing "how much" to blend is vital.
### Range of Blends in Pew Cases




Source: Graham, C. R., & Allen, S. (2005). Blended learning: An emerging trend in education. In C. Howard & J. V. Boettecher & L. Justice & K. D. Schenk & P. L. Rogers & G. A. Berg (Eds.), *Encyclopedia of Distance Learning* (pp. 172-179). Hershey, PA: Idea Group Inc.

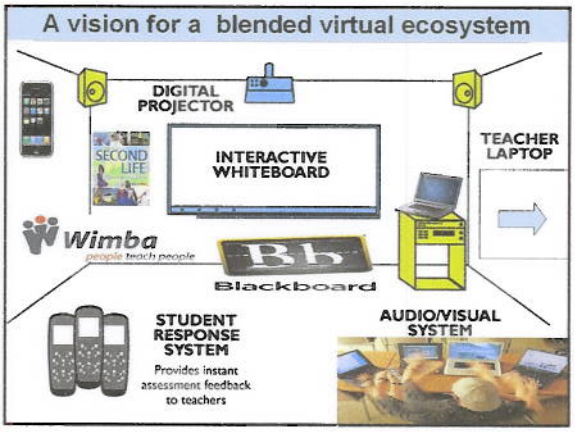
## Myths #4: Blended learning is easy to define.
## Myth #5: Blended learning is hard to define.
### Blending Online and F2F Instruction

- **"Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)**

## Trying to Define it is a Trap!!!

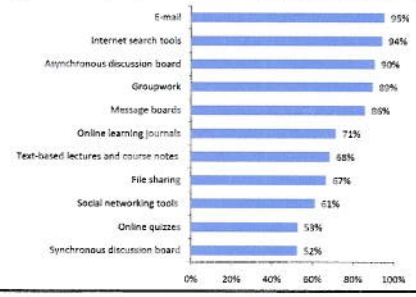
**A Rebel From Another Galaxy, March 14, 2010**
**By Andrea Fuller**

## A vision for a blended virtual ecosystem



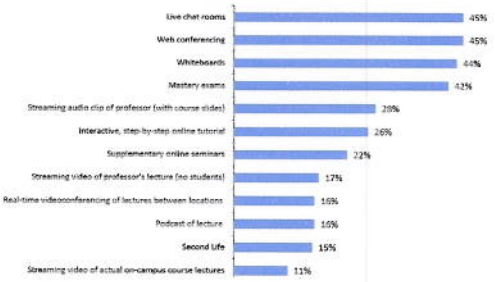

## Trends in Instructional Tool Usage in Online Education Programs, Research Brief, Eduventures, February 2010 (study of 96 universities)

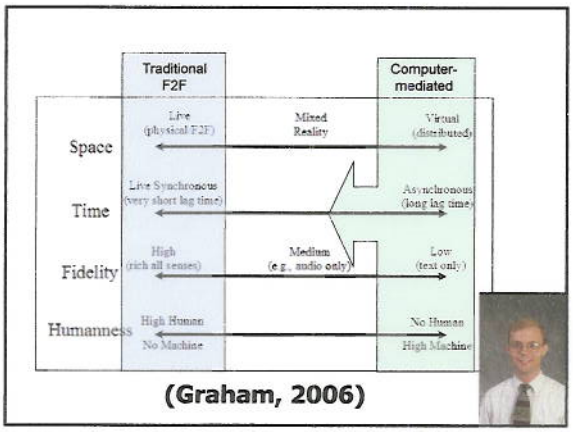
Figure 3. Most Frequently Used Instructional Media and Approaches in SOEs' Online Courses



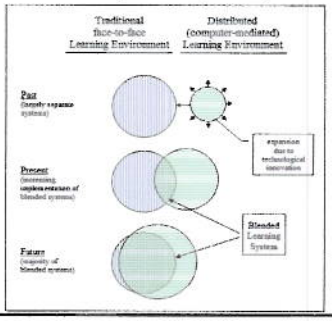

## Trends in Instructional Tool Usage in Online Education Programs, Research Brief, Eduventures, February 2010 (study of 96 universities)

Figure 5. Less Frequently Used Instructional Media and Approaches in SOEs' Online Courses




## Historical Emergence of Fully Online and Blended (Graham, 2006)

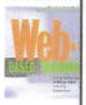


Myth #6: Blended learning works everywhere.

## Where is Blended Beneficial?

- Large Classes (spanish, intro psych, algebra, elementary statistics, biology)
- Classes with working students
- Students spread over a distance
- Classes with certification
- Classes with need for standardization
- New requirements for a profession
- Writing intensive classes
- Theory classes

## Examples of Blended Learning, Margaret Driscoll, e-Learning, March 2002

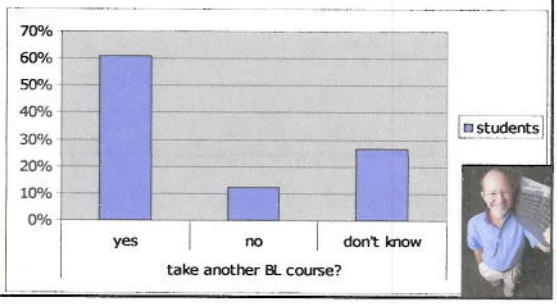



- Put assessments/reviews online
- Follow-up in community of practice
- Put reference materials on Web
- Deliver pre-work online
- Provide office hours online
- Use mentoring/coaching tool
- Access experts live online
- Use e-mail and instant messaging

## Fully Online and Blended Learning Advantages

1. Increased Learning (better papers, higher scores)
2. More effective pedagogy and interaction
3. Course access at one's convenience and flexible completion (e.g., multiple ways to meet course objectives)
4. Reduction in physical class or space needs, commuting, parking
5. Increased opportunities for human interaction, communication, & contact among students
6. Introverts participate more

## Student Satisfaction in Canada for Blended Learning (Owston, Garrison, & Cook 2006)



Myth #7: People learn more in face-to-face settings than blended or fully online ones.

Fully Online and Blended Learning Advantages

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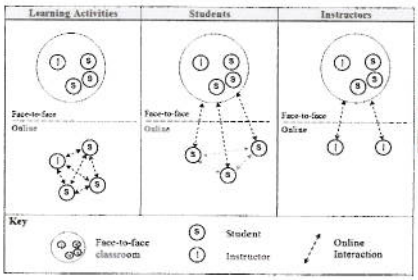
Myth #8: Faculty can have a logical discussion with administrators about blended learning.

## Models of Blending

**Blending occurs at the following four levels:**

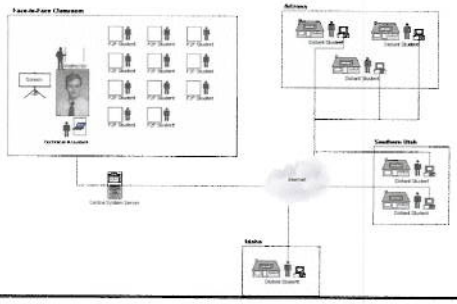
## 1. Activity- and Course-Level Blends

Blended learning systems: Definitions and directions
**(Osguthorpe & Graham, 2003)**



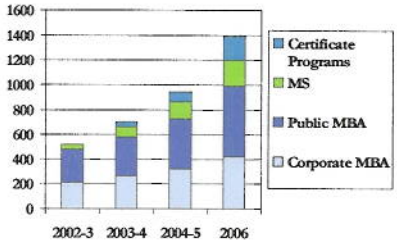
## 2. Course-Level Blend: Using CMS to blend distance and F2F learners

**(Rogers, Graham, et al., 2003)**



## 3. Program-level blending (blend same for all participants)

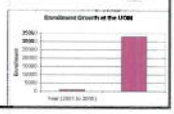
**Kelley Direct Online MBA (IU)**



## 4. The Open U Malaysia

**(from Abtar Kaur)**

- **Started August 2001 : approx. 800 students**
- **Total students (2005): approx. 33,000**
- **Total students (2010): over 85,000**
- **Total full-time academic staff : 60**
- **Total part-time academic staff (tutors): approx 3,000**
- **33 Learning Centres (7 Regional Centres)**
- **Pedagogical approach: Blended Learning**



## Categories of Blends

| | |
|---|---|
| **A. Enabling Blends** | **Enabling blends primarily focus on addressing issues of access and convenience; provide similar learning experiences.** |
| **B. Enhancing Blends** | **Enhancing blends allow for incremental changes to the pedagogy; additional or supplementary online resources.** |
| **C. Transforming Blends** | **Transforming blends are blends that allow for a radical transformation of the pedagogy and learner construction of knowledge.** |

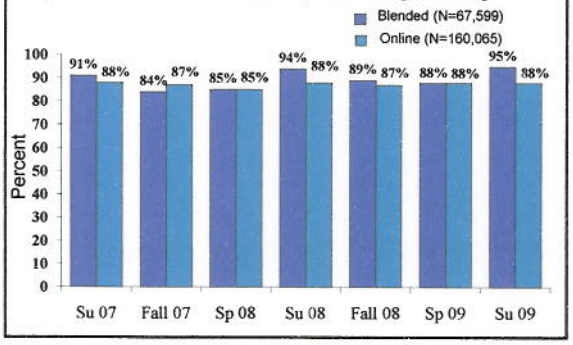
**Myth #9: There is one best model of blended.**

**AMA Special Report, Effectively Implementing a Blended Learning Approach**

**(Steven Shaw & Nicholas Igneri, 2006)**

Source: American Management Association, AMA at Work

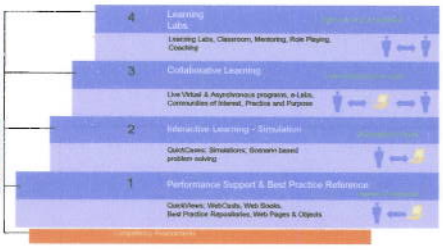
## Overall success rates by modality (Univ of Central Florida, February, 2010)




## Institutional-level Blending
**(Brian Linquist, University of Phoenix)**

- **Completely online courses**
- **Residential F2F courses**
- **Blended Courses**
  - ***Local Model*** **= 5 week courses with first and last week F2F**
  - ***Distance Model*** **= 5 week courses with half first and half last week F2F (the last meeting of one course is coordinated to be back-to-back with the first meeting of the next 5 week course)**

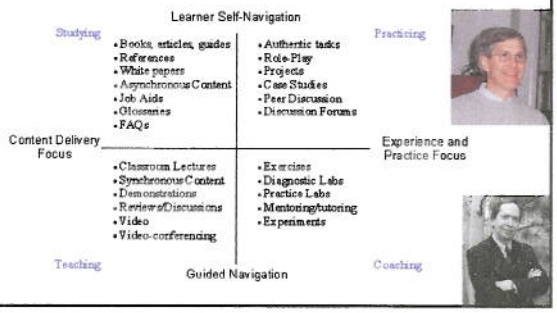
## The IBM Four Tier Learning Model (2006)
**Blending Learning for Business Impact – IBM's case for learning success,** *2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM*




**Framework for organizational development through training**

## Assess, Learn, and Apply
**(Copyright Microsoft, Ziob & Mosher, 2006; Handbook of Blended Learning)**

## Specific Learning Elements
**An Learning Ecology from Sun Microsystems (Wenger & Ferguson, 2006)**








## Myth #10: The Benefits of blended learning are easy to justify and document.

1. **Improved Pedagogy**
   - **Interactive vs. Transmissive environments**
   - **Authenticity integration into work**
2. **Increased Access/Flexibility**
   - **Reduced seat time courses – UCF M courses**
3. **Increased Cost Effectiveness**
   - **Corporate: ROI – IBM 47:1, Avaya, Microsoft**
   - **Higher Ed: PEW Grants**

## Part II: 13 Fully Online and Blended Learning Problems and 33 Solutions

## Problem Situation #1: Brief FTF Experiences

- Face-to-face (FTF) experiences are brief, one-week journeys. Need to need to build self-confidence, create social supports, teams, camaraderie, etc.

## Ok, Million Dollar Question: What can you do in 1 week?

## Blended Solution #1+. Sample Activities for Brief Meetings

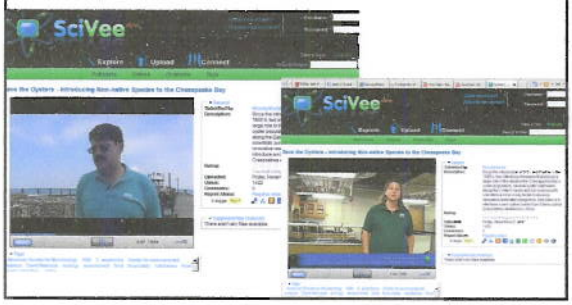
1. Assign web buddies, email pals, critical friends based on interests, confidence, location, etc.
2. Ice breakers—paired introductions, corners.
3. Solve case in team competitions with awards.
4. Test technology in a lab.
5. Assign teams and exchange info for small teams using text messaging.
6. Library (digital and physical) scavenger hunt.
7. Do a podcast documenting the meeting.
8. Have everyone create a blog on the experience.
9. Open an e-portfolio for each student
10. Brainstorm how might use technology in program.

## Problem Situation #2: Student Absenteeism

- Students miss class to attend a conference or event or a personal problem arises. Or students asks to watch the class a second time.

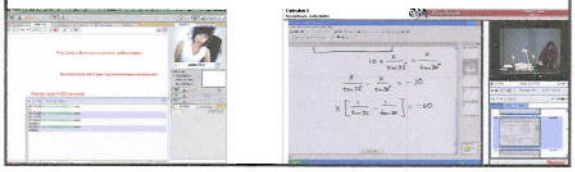
## Blended Solution #2. Post Courses in YouTube and iTunes (e.g., Berkeley)

## Blended Solution #3.
### Assign Online Shared Video
(SciVee, Research Channel, doFlick, UC)




## Problem Situation #3:
## Facilities and Time

- Limited facilities or rooms for teaching. Or students cannot make it to class every week or are working full time.



## Blended Solution #4.
### Alternating FTF and Online Classes

- Freshman English at BYU: Students are required to meet F2F once a week instead of three times a week. Same in a multimedia class at Beijing Normal University (BNU)

## Blended Solution #5.
### Streaming Class Video for Remote Students (e.g., Tegrity, Univ of Central Florida)

Within a single semester, more than 2,300 UCF students and 80 faculty members were using Tegrity Campus 2.0, making classes available to every student in the college, anytime.

## Problem Situation #4:
## Web Supplemental Activities

- Fail to finish class discussion or other activity in time. Or desire to integrate the Web more in your face-to-face instruction or outside of class. Want to provide course resources and activities for students to explore.

## Blended Solution #6.
### Using Open Access Journals
(e.g., PLOS, JIOL, IRRODL)

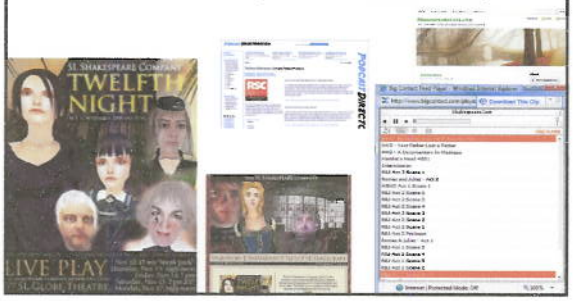
## Blended Solution #7.

**Khan Academy** (videos on math, bio, trig, chemistry, money and banking, economics, statistics, etc.; http://www.khanacademy.org/)

## Blended Solution #8.
## Online Portal Explorations

## Blended Solution #9.
## Virtual Worlds/Reality/MMOG

(e.g., Second Life, There.com, Kaneva, etc.
Harvard Law School, Charles & Rebecca Nesson)




## Blended Solution #10. Space Portals

(e.g., A New Motion Picture of the Universe, With Free Admission for Colleges Large and Small, By Ben Terris, Chronicle of HE, Feb 7, 2010)

From its mountaintop site of Cerro Panchón, in Chile (rendered above), the new telescope will look for dangerous asteroids and help researchers learn more about dark matter and dark energy. The Large Synoptic Survey Telescope has a combination of mirrors and three camera lenses that can capture the movements of billions of stars and galaxies.

## Blended Solution #11. Open Ed Resources & OpenCourseWare (e.g., MIT OpenCourseWare)

## Problem Situation #5: Student Learning Control

- **Want to give students more control and ownership over their own learning. Want to foster student generative learning or being authors of their own knowledge.**

## Blended Solution #12. Student Developed Wikibooks (e.g., Web 2.0 and Emerging Learning Technologies (The WELT))

## Problem Situation #6: Preparedness for the Profession

- Students are not prepared for their professions when they graduate. Or want to better apprentice students into their chosen profession. What to provide opportunities to work with practitioners, experts, mentors, and coaches in authentic learning environment.

## Blended Solution #13. Online Professional Development (e.g., STARLINK, *www.starlinktraining.org*)

## Blended Solution #14. Professional Videos

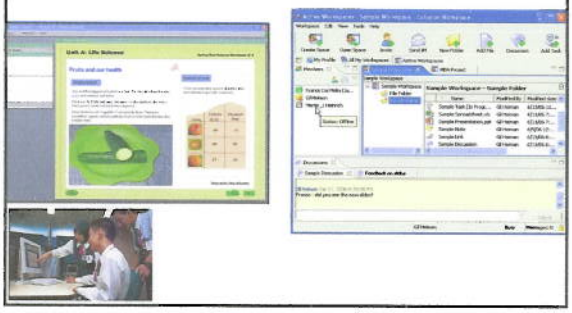
(e.g., University Puts Researchers on YouTube to Stir Commercial Interest, Jill Laster, Chronicle of HE, Feb 5, 2010
http://chronicle.com/blogPost/University-Puts-Researchers-on/21094/?sid=at&utm_source=at&utm_medium=en

## Blended Solution #15. Real World Problems (PBL online): Real-time Cases

## Problem Situation #7: Collaborative Skill Deficit

- Students need collaboration and teamwork skills. Want to build virtual teaming skills in class activities or work with learners in other locales or situations.

## Blended Solution #16. Working In Virtual Teams (e.g., Collanos, Groove, SharePoint, Google Docs)



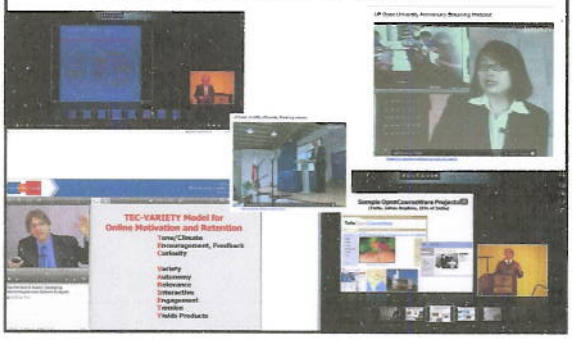
## Blended Solution #17. Cross-Class Collab (Indiana University and Open U of Malaysia; Univ of Illinois Tourism class)

## Problem Situation #8: Student Reflections and Connections

- Students are not connecting content. They are just turning pages and going through the motions. Minimal student reflection is seen.

## Blended Solution #18. Expert Video Reflections and Scaffolds online (E-Reading First Ohio; reflect, share, and compare)

## Blended Solution #19. Watch or Listen to Online Conferences




## Problem Situation #9: Learning Community

- There is a preference for creating an online learning community in order to increase student learning and retention in the program. Such a community might be in a single class or across a series of classes.

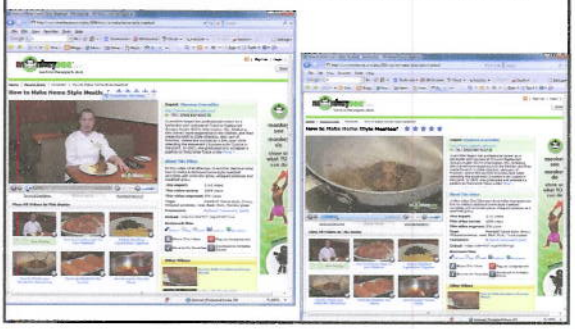
## Blended Solution #20. Create am Online Community in Ning, Google Groups, or Yahoo Groups.

## Problem Situation #10: Need to Visualize Content

- Content is highly visual in nature and difficult to simply discuss in class. Or students have a preference for visual learning.

## Blended Solution #21. Simulations and Virtual Worlds Online (e.g., OpenSimulator http://opensimulator.org/wiki/Main_Page)

## Blended Solution #22: Shared Online Video Demonstrations (e.g., Monkey See)

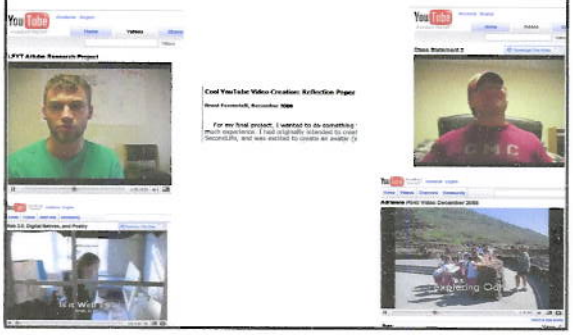


## Blended Solution #23. Virtual Tours and Timelines (i.e., HyperHistory; http://simile.mit.edu/timeline/)

## Problem Situation #11: Need for Hands-On Learning

- To learn the material requires that students try it out in a lab or real-world situation. Or students prefer hands-on learning activities.

## Blended Solution #24. Video Production

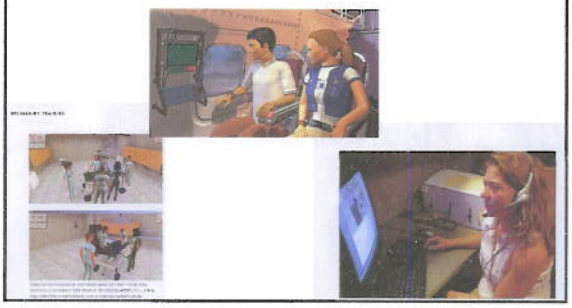


## Blended Solution #25. Explore Virtual Worlds and Online Representations

(UCLAs CVRLab, University of Virginia)

## Blended Solution #26. Educational Simulations

(Medical Traumas from TD Magazine, August 2006)



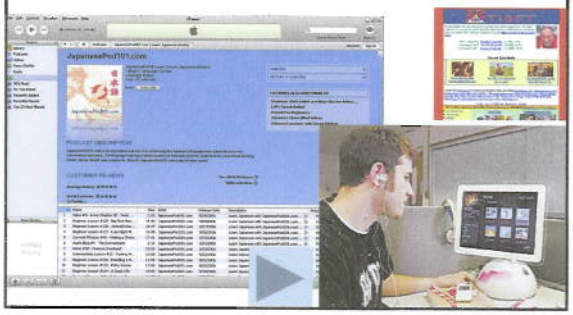
## Problem Situation #12: Preference for Auditory Learning

- The content is heavily verbal or words. Or students have a preference to listen to a lecture or hear an instructor deliver a lecture.

## Blended Solution #27. Basic Acoustics of Musical Instruments 2005 MERLOT Classics Award

## Blended Solution #28: Free Podcast Shows; Language Learning (ChinesePod—learn Mandarin)

## Blended Solution #29. Self-Paced Language Programs:
**JapanesePod, Arabic online, etc.**

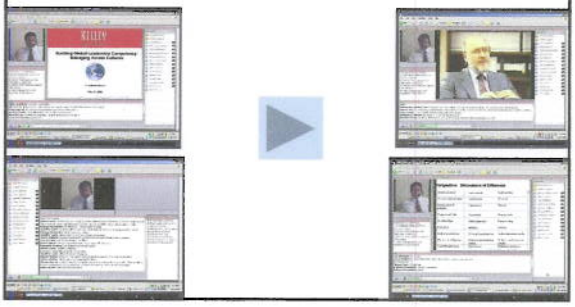


## Blended Solution #30. Indexing Sounds in Cities with Google Maps

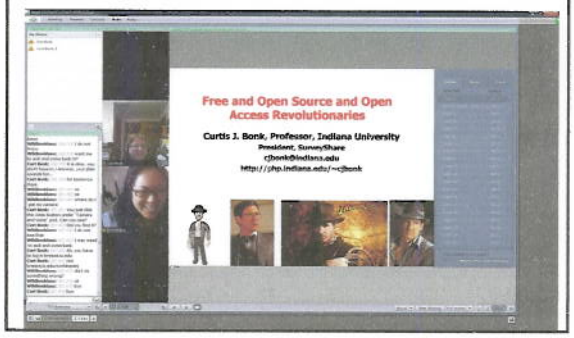
## Problem Situation #13: Lack of Instructor Presence

- Students need to see or hear from the instructor. They need a sense that the instructor is supporting their learning. They prefer face-to-face but are willing to try online.

## Blended Solution #31. Instructor Presentation in Synchronous Sessions
**(Breeze/Adobe Connect Pro, Elluminate, WebEx, Dim Dim)**



## Blended Solution #32. Archive Synchronous Session




## Blended Solution #33: Teaching with Twitter

## Trends, Implications, and Challenges for Blended Learning

1. Faculty and students are more mobile.
2. Students more choices.
3. Student expectations rise.
4. Greater self-determined learning.
5. More corporate university partnerships.
6. Courses increasingly modular.
7. Less predefined schedules.
8. When teaching less clear; when learning less clear.

## Again, this talk covered…

1. Definitions of blended learning
2. Advantages and disadvantages
3. Models of blended learning
4. Examples of blended learning
5. Predictions for blended learning
6. Challenges for blended learning

## Questions and Comments

**Note: Bonk papers and talks at:**
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